

Basic requirements

- Top level view of status of a storage element.
- Ability to drill down to more and more detailed status
- Extensible
- Include information on states of storage and reasons why in that state (i.e. - Up, Down, Paused, Draining...)
- Utilize existing technology where possible
- must be web based

Current status

- GLUE schema can be used to set basic structure of the storage dashboard
- Storage properties and storage states are available through GLUE schema v1.3.
 - OSG runs service that collects information compliant to that schema.
 - We are interested in v1.3 which is only used in OSG integration test bed environment
 - I found no presentation tools for “easy to use” display of the storage aspects of the schema
 - Example <Next slide>

Primitive non web based LDAP explorer

LDAP Browser\Editor v2.8.2 - [ldap://is-itb.grid.iu.edu:2170/mds-vo-name=local

File Edit View LDIF Help

GlueSEStatus available from GLUE v1.3

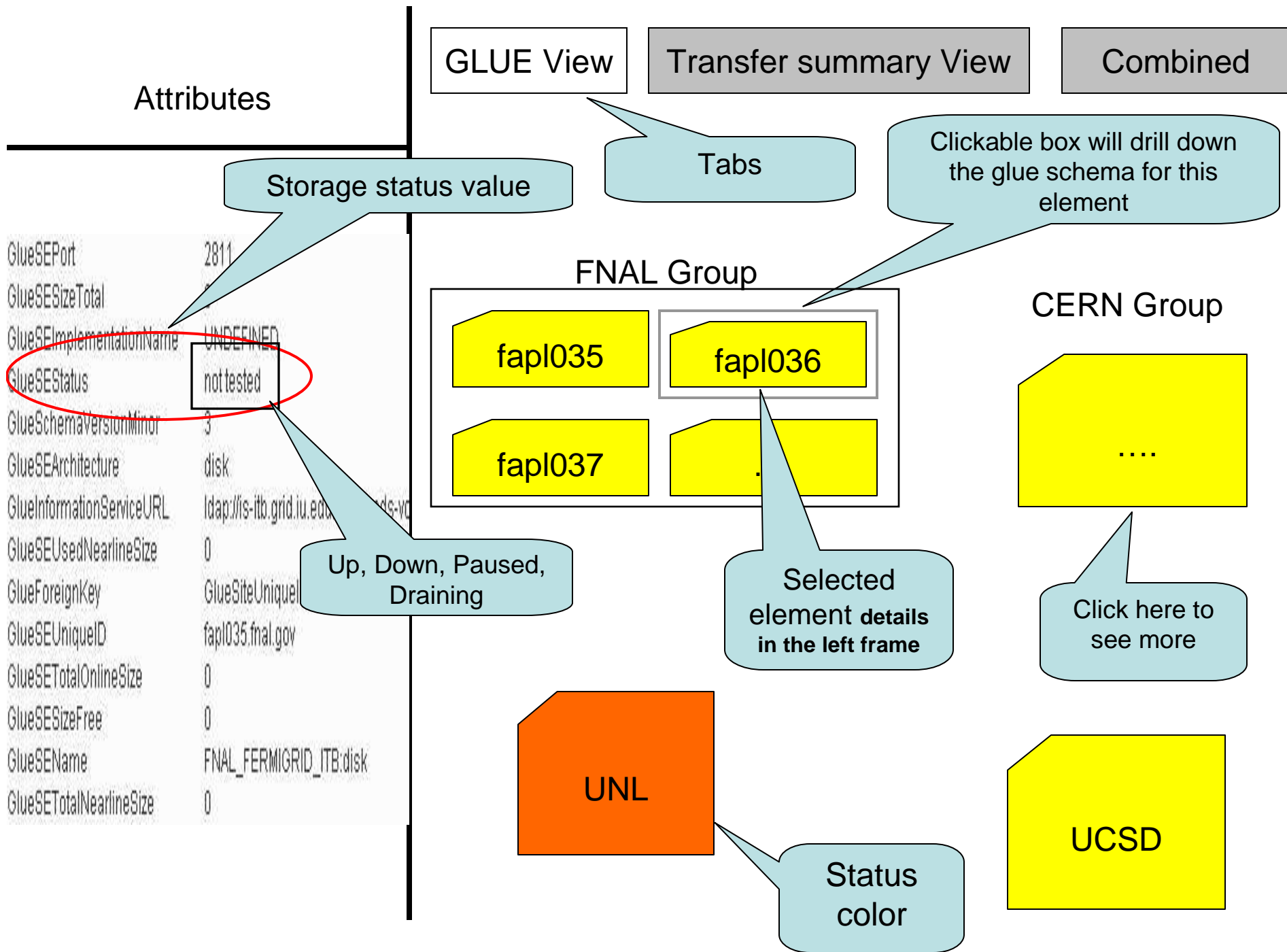
GlueSEUniqueID=fapl031.fnal.gov

Attribute	Value
GlueSEUsedOnline	0
GlueSchemaVersion	1
objectClass	GlueSETop
objectClass	GlueSE
objectClass	GlueInformationService
objectClass	GlueKey
objectClass	GlueSchemaVersion
GlueSEImplementationVersion	UNDEFINED
GlueSEPort	8443
GlueSESizeTotal	0
GlueSEImplementationName	UNDEFINED
GlueSEStatus	not tested
GlueSchemaVersionMinor	3
GlueSEArchitecture	srm
GlueInformationServiceURL	ldap://is-itb.grid.iu.edu:2170/mds-vo-name=local
GlueSEUsedNearlineSize	0
GlueForeignKey	GlueSiteUniqueID=fgitb-gk.fnal.gov
GlueSEUniqueID	fapl031.fnal.gov
GlueSETotalOnlineSize	0
GlueSESizeFree	0
GlueSEName	FNAL_FAPL_ITB_SE:srm_v1
GlueSETotalNearlineSize	0

v1.3 is not used to publish states of the production facilities
Available only through OSG integration testing environment

Issues

- Coordinate coherent use of GLUE v1.3 over production storage deployments.
 - v1.3 deployment starts Nov 1
- Develop specialized presentation layer to navigate and display details of FermiLab (and beyond) storages
 - Can built something like <Next Slide> to display storage properties and storage states using rule driven schema browser
 - hopefully generic enough for open source project



Furthermore

- If generic enough, the tool can display other data sources
 - Correlate test result of different links
 - infer “true” storage status
 - Build graphs over data search results
 - Must understand multiple data formats - XML, LDAP, relational DB . (Or be able to convert from one to another)

Transfer summary

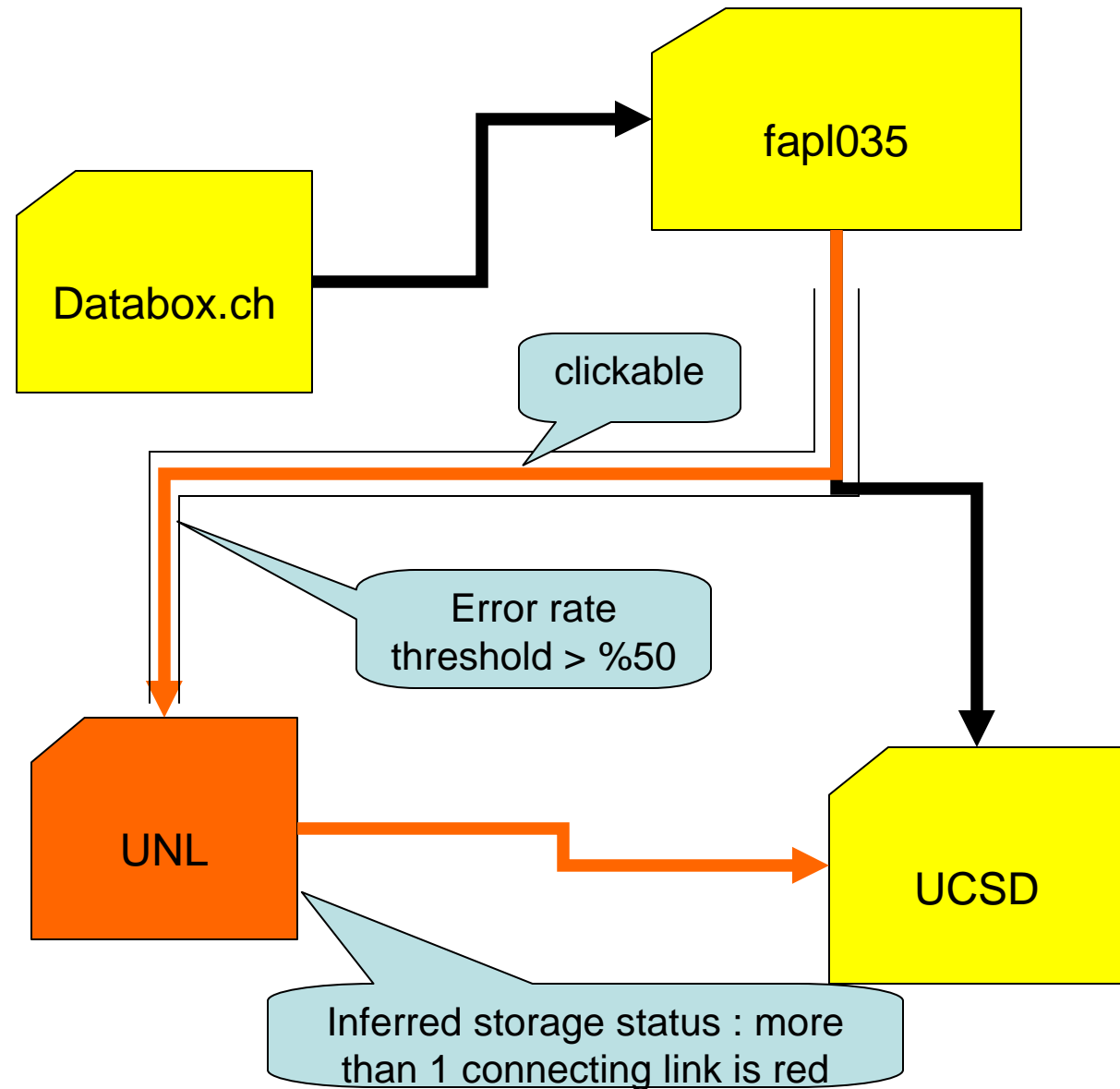
GLUE View

Transfer summary View

Combined

Transfer stats:

Total
Auth failures
connection refused
Srm failure
Transport failure
Unknown



What's needed

- Understand the scope
- Target user community (storage support groups, storage users, or be a “poster child”)
- Features that may be needed in the future
- Project time constraints
- GUI/Web expert